

REMARKS

Claims 1, 3, 5, 7, 10, and 15–18 are pending in the Application. Upon entry of this Amendment, Claims 1, 7, 10, and 15–22 will be pending in the Application, of which, Claims 1 and 7 are independent. Applicants are canceling Claims 3 and 5; amending Claims 1, 7, 10, and 15–18; and adding Claims 19–22 (details of which are presented below).

Procedural Note

Applicants respectfully submit that this Amendment after Final (AAF) Rejection incorporates the amendments made in Applicants' Supplemental Amendment, filed November 22, 2010, and the remarks presented in Applicants' Response after Final Rejection, filed January 7, 2010. Applicants respectfully submit that this AAF includes all of Applicants' remarks and amendments such that it is a fully responsive reply to the November 22, 2010 Office Action. As such, Applicants respectfully request that any subsequent Office action be responsive to the instant AAF.

Statement of Substance of Interview

Although previously provided to the Office, Applicants submit the below Statement of Substance of Interview for convenience.

An Examiner's Interview was conducted via conference call on September 21, 2010 with Examiner Andrew Lee, Mr. Yang Rong of Huawei Technologies Co., Ltd., and Applicants' Attorneys James M. Smith and Alexis A. Liistro, in attendance. Applicants and Applicants Attorneys thank Examiner Lee for helpful suggestions offered during the Examiner's Interview. The substance of the interview concerned a Non-Final Office Action, mailed from the U.S. Patent and Trademark Office on June 8, 2010 and a Reply filed, in response to the Action, on September 7, 2010. Specifically, attendees discussed the current state of routing in light of the three cited references. Attendees broadly discussed the current state of Claims 1, 3, 5, and 7, but did not reach an agreement. The Examiner noted a review of the claims in view of the specification would be helpful and indicated a willingness to consider a proposed amendment to the claims in order to further prosecution. In particular, the Examiner discussed Applicants' Figs. 6 and 8, along with the corresponding description in the Specification, as being primarily

important for consideration in amending the Claims. Applicants thank Examiner Lee for his direction towards these portions of the Specification and Applicants have included the substance thereof into the proposed amendments and remarks.

Claim Rejections under 35 U.S.C. § 103(a)

As of the final Office Action mailed November 22, 2010, Claims 1, 3, 5, 7, 10, and 15–18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over a combination of Wong *et al.*, U.S. Pub. No. 2004/0037278 B1 (hereinafter “Wong”), in view of Gifford, U.S. Patent No. 6,052,718 (hereinafter “Gifford”), and further in view of Narvaez-Guarnieri *et al.*, U.S. Patent No.: 6,098,107 (hereinafter “Narvaez”). Applicants respectfully submit that, in view of the current amendments, Applicants claims, namely Claims 1, 7, 10, and 15–22, are novel and non-obvious over the combination of Wong, Gifford, and Narvaez for the reasons set forth below.

Applicants are herein cancelling independent Claim 3, and amending independent Claim 1 to incorporate elements of Claim 3. Similarly, Applicants are herein cancelling independent Claim 5, and amending independent Claim 7 to incorporate elements of Claim 5. Claims 10 and 15–18 are being amended for dependency. In addition, Applicants are adding new Claims 19–22 as clarifying claims, which Applicants believe do not add new subject matter.

Support for these claim amendments and new claims can be found throughout Applicants’ Specification as originally filed, for example, at least at page 4, lines 8–14; page 6, lines 11–12; page 6, line 33 through page 7, line 2; page 7, lines 21–34; page 8, lines 6–24; page 9, lines 3–8 and 19–25; and Figures 5B–8.

Applicants respectfully submit that the amended and new claims, presented in the Claim Listing above, further clarify embodiments of the invention and further distinguish over the cited art as noted below.

First, Applicants’ Claim 1 explicitly recites, “*a routing table configured to use a destination IP address...to route the IP data packet by determining a composite output trunk.*” Applicants respectfully submit the explicit recitation of “*a routing table...[for]...determining a composite output trunk,*” as evidenced in Applicants’ Figure 8, element 306, further clarifies the patentably distinguishing features of the present invention over cited art Wong.

In addition, Applicants submit that the “*routing table*” in Claim 1 further clarifies Applicants’ recited output port selector (*i.e.*, “*an output port selector configured to use the determined composite output trunk...to select an individual output port of the composite output trunk;*”) as also recited in Claim 1. As described in Applicants’ Specification, page 8, lines 11–24 and depicted in Figure 8, elements 308 and 309, the output port selector is a separate mechanism from the routing table; the output port selector being described for “*selecting the individual output port of the composite output trunk* (emphasis added)” (whereas only the composite output trunk is determined by the routing table, *see, e.g.*, Fig. 8, elements 305 and 306).

Furthermore, in addition to the routing table and the output port selector described above, Applicants’ Claim 1 explicitly recites a second table, (*i.e.*, “*a forwarding table having plural entries to each individual output port*”). The “*forwarding table*” is a separate table from the “*routing table*,” as described in Applicants’ Specification as originally filed, for example, at least on page 9, lines 19–25 and Fig. 8, element 308.

In other words, Applicants’ Claim 1 explicitly recites, “*a routing table*,” “*an output port selector*,” and “*a forwarding table*,” each of which presents a distinct element but may have associated functionality and/or interoperability (as recited in the claims). Applicants respectfully submit that at least these elements as presented in the claims (*i.e.*, the “*routing table*,” the “*output port selector*,” and the “*forwarding table*”) are wholly absent from Wong. These features of Claim 1 are similarly absent from Gifford and Narvaez.

Second, the Office acknowledges that Wong and Gifford fail to disclose “*dynamically weighting a number of entries to each route to the common destination*,” as recited in Applicants’ Claim 1, as presented on September 7, 2010. Applicants note Gifford has only been cited for explicitly disclosing “*IP data packets*.” However, the Office further cites Gifford col. 11, lines 31–62 as being said to “implicitly disclose[] dynamically weighting a number of entries to each route to the common destination.” Office Action, page 4, first para. (emphasis added). However, Applicants’ Claim 1 recites, “*dynamically balancing load by weighting a number of entries to each individual output port*.” Applicants note that the cited portion of Gifford is describing Gifford’s router, which is merely updating a routing database dynamically. In light of Applicants’ claim elements (*i.e.*, “*dynamically balancing load by weighting a number of entries*

to each individual output port”), Applicants respectfully submit Gifford fails to disclose any such concept explicitly or implicitly.

Last, the Office cited Narvaez as being said to disclose “*dynamically weighting a number of entries to each route to the common destination*,” as recited in Applicants’ Claim 1, as presented on September 7, 2010. First, Applicants respectfully submit that, in light of the claim amendments previously presented on November 22, 2010 (*i.e.*, “*dynamically balancing load by weighting a number of entries to each individual output port, each entry in the forwarding table being dynamically rewritable to a different individual output port* (emphasis added)”), Claim 1 is patentably distinguishable over Narvaez. Specifically, Narvaez fails to “*dynamically balance[e] load*” and is silent as to any forwarding table such that “*each entry in the forwarding table being dynamically rewritable*,” as further recited in Applicants’ Claim 1 (emphasis added).

In addition, Applicants respectfully submit that Narvaez is merely disclosing dynamic adjustment of a shortest path tree structure and uses the weight to compute shortest routes from the router through the network. *See* Narvaez, Abstract. Such dynamic adjustment of a path using a weight is solving a different problem than Applicants’ Claim 1, namely, Narvaez is concerned with adjusting shortest routes from a router through a network, and not “*dynamically balancing load...to each individual output port*,” as in Applicants’ Claim 1 (emphasis added). More notably, Narvaez discloses, “determining a weight change of an edge.” *See, e.g.*, Narvaez, col. 5, line 66 to col. 6, line 27 (emphasis added). As such, Narvaez is merely maintaining and updating a “data structure consisting of a set of edges” that interconnects nodes in the network, that data structure being used to program the routing table. In other words, Narvaez’s “dynamic adjustment” only applies to a data structure consisting of a set of edge nodes. Therefore, Applicants respectfully submit that Narvaez’s updating of an edge node weight is not “*dynamically balancing load by weighting a number of entries to each individual output port, each entry in the forwarding table being dynamically rewritable to a different individual output port*,” as recited in Claim 1.

Therefore, Applicants respectfully submit that, in light of the above remarks, the hypothetical system combining Wong, Gifford, and Narvaez would fail to teach all elements of Applicants’ Claim 1, and, thus, Claim 1 is novel and non-obvious over the cited art. Applicants independent Claim 7 recites similar elements as Claim 1; thus, Applicants respectfully submit

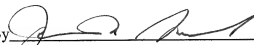
that Claim 7 is also novel and non-obvious over the cited art for at least the same reasons. Claims 10 and 15-22 depend from independent Claims 1 or 7, include the same elements as the claims from which they depend, and are novel and non-obvious for at least the same reasons as presented above. As such, Applicants respectfully submit that the rejection of Claims 1, 7, 10, and 15-22 are overcome and respectfully request withdrawal of the rejection and acceptance of the claims.

CONCLUSION

In view of the above amendments and remarks, it is believed that, upon entry of this Amendment, all claims, namely Claims 1, 7, 10, and 15-22, are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned.

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